Conservation in the Klamath Basin...

Partnership Accomplishments

NRCS Natural Resources Conservation Service

The Klamath River Basin presents numerous challenges as well as opportunities for its many water users. For many years, farmers and ranchers in the Klamath Basin have recognized the vital role they play in the health of their watershed. Working with conservation districts, NRCS and others, local landowners continue to proactively find ways to enhance natural resources in the basin, benefiting wildlife and the environment. However, as it has across the western United States, drought hit home in the Klamath for those who depend on every drop of water to sustain their livelihood, culture and community.

Photographer: Tupper Blake

In the spring of 2001, the combination of drought and the impact of the Endangered Species Act triggered a shutdown of irrigation water during the growing season, drying up water resources to more than 2,000 farms and ranches. USDA's Natural Resources Conservation Service, in cooperation with local conservation districts, provided a quick infusion of technical assistance and $2 million in cost-share funding for cover crops through the Emergency Watershed Protection Program. As cover crops took hold, the seeds of a long-term solution took root in the NRCS/conservation district partnership. The ability of the local office to receive funding, engage community members and other partners, plan resource improvements, implement actions, and monitor success proved to be an invaluable asset for the community.

In the face of an increasingly complex and politically polarized situation, a clear purpose and direction arose from those early actions. Local communities gained trust in the conservation partnership's ability to identify the impacts of drought on farms and ranches, and find solutions to improve and sustain agriculture.

Helping private landowners develop and apply practical, common-sense solutions to complex resource issues will be the challenge of the conservation partnership well into the future. USDA, in concert with the locally led conservation districts, will continue to play a critical role by delivering technical and financial assistance to Klamath Basin farmers and ranchers.

Conservation Partnership Highlights

Significant improvements continue to be made to the landscape in the Klamath Basin. Conservation districts lead the way, guiding the work of the partnership to conserve and enhance natural resources in the basin, using a variety of Farm Bill and other conservation programs.

In the last two years, over 2,700 landowners have received assistance from the conservation partnership to improve the condition of natural resources on their land.

Conservation systems have been planned on 66,869 acres to address natural resource concerns in the basin, including conserving water from livestock and irrigation practices, thinning juniper stands, and managing pests and nutrients.

The NRCS Water Resource Planning staff in Oregon and California began an assessment process of the natural resource conditions and trends in the basin. **The assessment was completed on over 3.4 million acres of private land** and presented to the districts and NRCS staff to assist in setting priorities and determining the best conservation activities to create and maintain a healthy watershed.

The conservation partnership will continue to work closely with landowners in the Klamath Basin as their livelihood depends on their commitment to conserving and protecting the natural resources of their landscape.

Local Conservation Goals

In the fall of 2001, the Klamath Soil & Water Conservation District (SWCD) in Oregon and the Lava Beds/Butte Valley Resource Conservation District (RCD) in California met with NRCS in the first of a series of strategic planning sessions. From these meetings, locally elected leaders developed a list of mutual resource goals and objectives for the Basin.

The conservation districts' primary goal is a reliable water supply for agriculture. Their core objectives are to **decrease water demand, increase water storage, improve water quality, and develop fish and wildlife habitat**. With these objectives in mind, potential outcomes have been identified from conservation activities in the Klamath Basin.

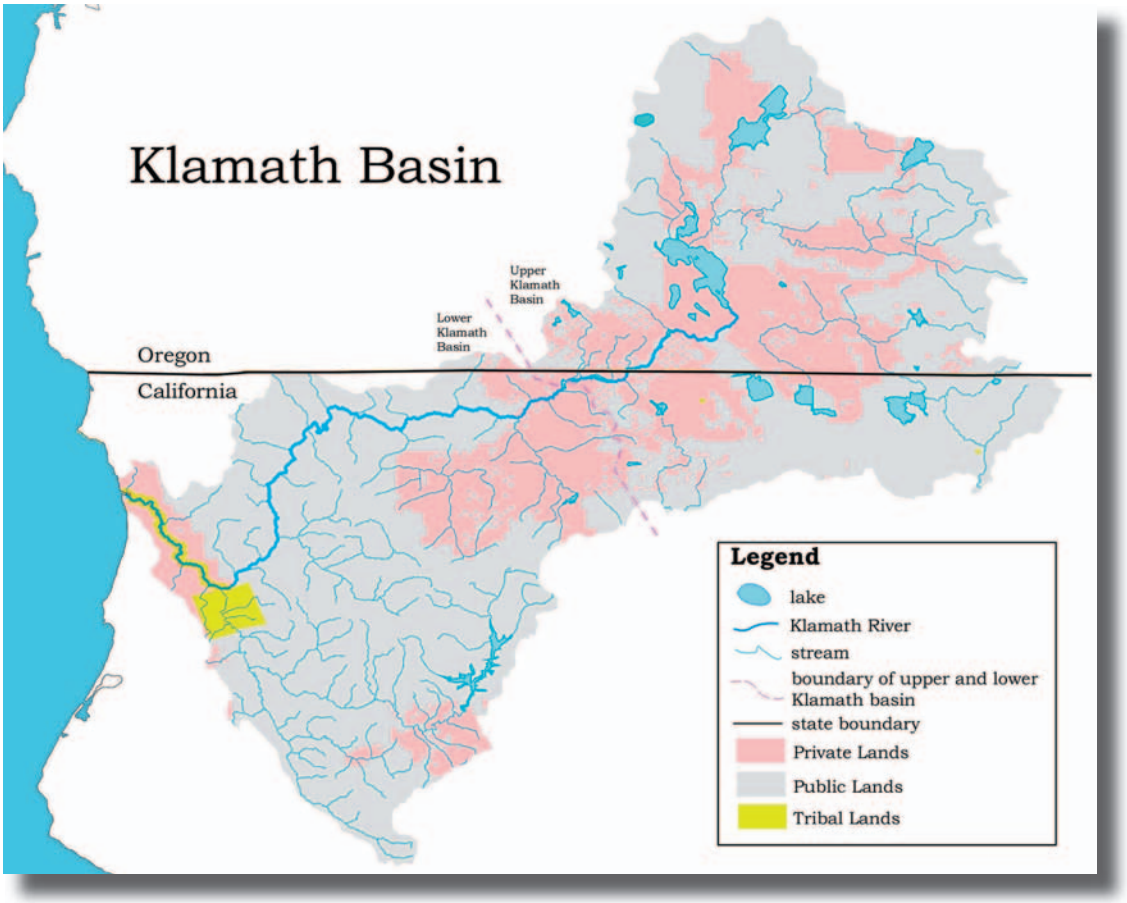
Currently, a coalition of the six districts and two Resource Conservation and Development Areas in the Klamath Basin are working to establish a strategy to address resource concerns, set priorities and obtain funding to achieve the conservation districts' goals across the entire watershed.

Conservation Assistance

Farmers and ranchers recognize the importance of their role in conserving natural resources in the basin. Well-maintained farmland creates fish and wildlife habitat, improves water quality and quantity and contributes to a healthy watershed.

Working with local landowners, during the 2002 and 2003 fiscal years the conservation partnership has:

- **Assisted over 2,700 landowners** in applying for financial assistance, completing natural resource inventories, installing conservation systems and improving the condition of natural resources on their land.
- **Planned conservation systems on 66,869 acres** and applied these practices to 25,950 acres to manage soil, water, air, plants and animals on private lands in the basin. When implemented, the systems (three or more conservation practices) will address all resource concerns on the land through such measures as establishing livestock watering facilities, conserving irrigation water, thinning juniper stands, managing pests and nutrients and improving pasture.
- **Conserved irrigation water on 16,006 acres.** With proper irrigation management and application landowners can meet their crop needs and increase profits, while lowering their on-farm water use by 6,700 acre-feet. Converting from flood systems to more efficient irrigation systems can result in an average of 30 percent on-farm water savings.
- **Created and enhanced wetlands on 2,241 acres.** The application of these wetland practices works to enhance and create additional habitat for fish and wildlife.
- **Improved wildlife habitat and upland watersheds on over 13,358 acres**, including 9,689 acres of upland habitat management. The application of these wildlife habitat practices benefits both aquatic and upland wildlife species.
- **Developed habitat for fish and other aquatic species on 2,786 acres,** establishing riparian forest buffers on 2,692 acres and filter strips on 94 acres. Water quality has improved from streambanks stabilized with vegetation, and soil in water runoff filtered through planted vegetation.
- **Improved the quality and production of vegetation on 17,515 acres of pastures.** Grazing plans were developed with landowners to identify proper stocking rates and grazing rotations that work in conjunction with irrigation schedules. The majority of landowners have seen an increase in the production and quality of their pastures.
- **Decreased soil erosion on 1,971 acres of cropland,** eliminated 8,522 tons of soil wind erosion.
- **Accelerated the ongoing Humboldt and Del Norte counties' soil survey,** which will provide resource planners with the tool they need to reduce erosion, maintain long-term land productivity, improve water quality, and restore wildlife habitat.



The Klamath Basin, located on the border between Oregon and California, covers slightly more than 10 million acres. There are approximately 3.8 million acres of private land, 6.1 million acres of public land and 90,000 acres of tribal land in the basin. On the private land, there are more than 2,000 farms/ranches operating on 581,800 acres.

Locally Led Conservation

It is critical that NRCS and the conservation districts work jointly in this effort with other government agencies, special interest groups, organizations, and individuals. Resolution of the current water problems in the Klamath Basin requires cooperation, compromise, and creativity. To that end, NRCS and the conservation districts have included numerous other agencies, organizations, and individuals to assist private landowners with their natural resource goals.

Some collaborative projects already occurring include:

- Local conservation districts assisted with the Environmental Quality Incentives Program (EQIP) development, landowner workshops, tours, and the development of the basinwide planning process.
- A new Tulelake Partnership office was established in July 2002. This joint effort was accomplished by NRCS, FSA, The Tulelake Partnership, and the Lava Beds-Butte Valley Resource Conservation District.
- Grants and donations from a local equipment company and the Bureau of Reclamation allowed the Klamath SWCD to purchase a no-till drill; 67 landowners have used the drill on 3,600 acres to plant their crops.
- The Klamath SWCD received a grant from the Oregon Watershed Enhancement Board to assist in landowner conservation projects. This was used to assist landowners with juniper removal, erosion control, irrigation systems, and weed eradication.
- NRCS is working with The Nature Conservancy to reestablish over 5,843 acres of wetlands.
- NRCS staff worked with the US Fish and Wildlife Service and Oregon Department of Fish and Wildlife with various issues concerning threatened and endangered species in the area.
- NRCS worked with the Yurok Indian Tribe to decrease erosion and protect their watershed with EQIP.
- NRCS worked with the Hoopa Valley Tribal Council and Hoopa Valley Public Utilities to develop an irrigation water supply design for the Hoopa Valley to meet their irrigation needs efficiently in a fish-friendly manner.
- NRCS Plant Materials center has tested various plant species to use for creating buffers along irrigation ditches that would compete out weeds, provide wildlife habitat, and not require a significant amount of water.
- The Ore-Cal RC&D has hosted "Biomass to Energy in the Klamath Basin" workshops.

2002 Farm Bill Benefits Farmers, Fish and Economy

The Klamath SWCD, the Lava Beds/Butte Valley RCD, and others requested funds from Congress to achieve their conservation objectives. These efforts led to a Congressional earmark for $50 million in the 2002 Farm Bill for on-farm/ranch water conservation in the Klamath Basin. The basinwide planning process allows the utilization of these dollars to be directed locally.

In cooperation with various agencies, landowners and others, NRCS, FSA, and the districts are also utilizing a variety of Farm Bill programs to work with private landowners to conserve their natural resources. These include the Environmental Quality Incentives Program, Wetland Reserve Program, Wildlife Habitat Incentives Program, Conservation Reserve Enhancement Program and Grassland Reserve Program. NRCS technical assistance combined with Farm Bill programs enable private landowners to enhance and conserve the basin's natural resources.

NRCS Basinwide Planning

At the request of the local conservation districts, the NRCS Water Resources Planning staff in Oregon and California quickly initiated an assessment of natural resource conditions and trends in the basin. These rapid subbasin assessments include estimates of present resource conditions, conservation treatment recommendations, costs, resource effects, and identification of programs for addressing resource concerns.

The initial data has been presented to the districts and NRCS staff to assist local decision-makers in setting priorities and determining the best conservation activities to achieve their goals. Klamath landowners can use the assessments to determine the most appropriate management actions for conserving their natural resources.

Future planning assistance will include determinations of cumulative effects and specialized conservation applications to meet the districts' designated goals and objectives.

The Future

Although the work of NRCS and the conservation districts has been far-reaching, there continues to be a large need as well as a demand for conservation assistance.

Because they live on the land, and their livelihood is based on its sustainability, agricultural producers have the best opportunity to conserve and protect resources on private lands in the basin. NRCS and its partners will continue to work closely with them to conserve resources for future generations.

Public participation in providing cost share funds will be necessary to implement conservation practices as profit margins in the agriculture sector continue to be marginal to non-existent. More producers implement practices when it is cost effective to do so.

As NRCS and others learn more about the effectiveness of the conservation practices being applied through monitoring, their priorities, practices, funding, and policies can be adapted to continually improve future efforts. Additional watershed assessments are needed to provide detailed resource data in order to determine the accumulative effects of conservation treatments.